



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/588,807

08/07/2006

Alain Colin

6003.1075

2793

23280 7590 08/18/2009
Davidson, Davidson & Kappel, LLC
485 7th Avenue
14th Floor
New York, NY 10018

EXAMINER

BANH, DAVID H

ART UNIT

PAPER NUMBER

2854

MAIL DATE

DELIVERY MODE

08/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,807	Applicant(s) COLIN ET AL.	
	Examiner DAVID BANH	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 and 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 11 and 13-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11, 13, 16, 17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Zerillo (US PG Pub 2003/0183102).

For claim 11: Zerillo teaches a rotary element **60** of a printing press (see paragraphs 4 and 40) comprising an encoder **69** for generating a period first signal in response to the rotation of the rotary element **60** (see paragraph 40, the encoder **69** generates a signal for the position of the rotary element **60**, which is period since the rotary element **60** spins circularly), an evaluation unit **67** linked to the encoder **69** (see paragraph 40, the control unit **67** receives signal from the encoder **69**) having at least one synthesizer for generating a second signal having a resolution ratio, a frequency ratio and a phase relation to the first signal (see paragraph 53, a signal from the controller **67** rotates a cylinder motor **65**, thus a signal is produced by the unit, which necessarily is produced by a portion that is a synthesizer, any signal will have a resolution and a frequency, which can be a ratio to a different signal, and any signal will

Art Unit: 2854

have a phase relation to another signal), and a control interface **67a** (see paragraph 40, control interface is a user input device **67a**) for data exchange coupled to the synthesizer (the synthesizer is part of controller **67** which is connected to input device **67a**, see Fig. 1) for setting at least one of the resolution ratio, the frequency ratio and the phase relation of the first signal to the second signal based on data input by a user and transmitted to the synthesizer (a user enters instructions, which can be instructions for the position and speed of the motor and cylinder, thus this impacts the second signal and impacts the phase relation, resolution ratio and frequency ratio of the first signal to the second signal).

For claim 13: Zerillo teaches the rotary element of claim 11 wherein the evaluation unit **67** includes at least one output interface, the output interface outputting the second signal for driving a clock-pulse controlled device **65** (the output device is the synthesizer which is necessitated by the fact that the controller **67** produces a signal to the motor, and the motor is a clock pulse controlled device).

For claim 16: Zerillo teaches the rotary element of claim 11 where the first and second signals each are a sequence of signal pulses (the encoder **69** produces a signal for the position of the cylinder **60**, which would be a signal pulse sequence, and the controller **67** produces a signal for controlling the motor, which would be a sequence of signal pulses).

For claim 17: Zerillo teaches the rotary element of claim 11 wherein the rotary element **60** is a cylinder (see paragraph 40 and Fig. 1).

Art Unit: 2854

For claim 20: Zerillo teaches an offset press (see paragraph 4 and paragraph 40) comprising at least one rotary element as recited in claim 11 (the cylinder **60** may be part of a printing apparatus as in paragraph 40, the printing apparatus is generally lithographic offset as in paragraph 4).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zerillo (US PG Pub 2003/0183102) in view of Ecklemeyer (US Patent 4,271,379).

For claim 14: Zerillo teaches the rotary element of claim 11 but does not teach that the resolution of the second signal is lower than the resolution of the first signal. However, Ecklemeyer teaches a means of changing the resolution of a pulse signal for pulse trains carrying information about the speed and position of a motor (column 6, lines 18-45, claim 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the resolution changing means of Ecklemeyer with the invention taught by Zerillo for the purpose of controlling the first and second signals of Zerillo enabling the resolution of the output signal to be reduced to below the resolution of the incoming signals for the purpose of reducing the noise and random fluctuations that could be visible at higher resolutions.

For claim 15: The combination of Zerillo and Ecklemeyer teaches the rotary element of claim 14 and Ecklemeyer further teaches a divider (column 6, lines 18-45, speed adjusting means to adjust number of pulses per resolution) for reducing the resolution of the first signal.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zerillo (US PG Pub 2003/0183102) in view of Jackson et al. (US Patent 7,302,237) and Ecklemeyer (US Patent 4,271,379).

For claim 18: Zerillo teaches the rotary element of claim 11, but does not teach a further synthesizer for generating a further signal having a further resolution ratio, frequency ratio and phase relationship to the first signal. However, Jackson teaches a signal synthesizer that generates signals (column 6, lines 20-24, signal generator **10**), the signal having a frequency ratio (column 30-40, frequency as divide ratio) and a phase relation (column 2, lines 5-15, phase offset). Jackson does not discuss a resolution ratio; however, Ecklemeyer teaches a means for changing the resolution of a given signal (column 6, lines 18-45, claim 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Zerillo with the signal generator of Jackson et al. and the resolution modifier of Ecklemeyer for the purpose of being able to produce an optimized synthesized signal that be used to control the position of a rotary element.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zerillo (US PG Pub 2003/0183102) in view of Marmin (US Patent 5,242,367).

Art Unit: 2854

For claim 19: Zerillo teaches the rotary element of claim 11, but does not teach that the rotary element is found in a folding apparatus of a rotary offset press. However, Marmin teaches a folding apparatus in a rotary offset press (column 1, lines 5-10), including rotary elements (see Figure 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the rotary element taught by Zerillo as the rotary element for the folding apparatus taught by Marmin for the purpose of providing a user controllable cylinder that can perform a fold where desired as determined by input from a user.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID BANH whose telephone number is (571)270-3851. The examiner can normally be reached on M-Th 9:30AM-8PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2854

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DHB

/Judy Nguyen/
Supervisory Patent Examiner, Art Unit 2854